



Communicable Disease and Epidemiology News

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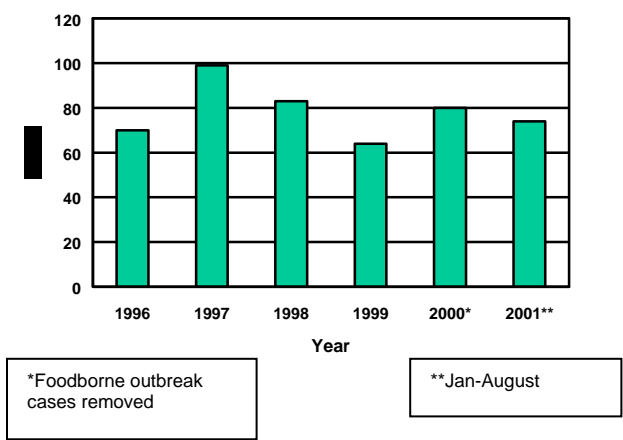
August 2001

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Shigella rises among MSM

Although the number of reported cases of culture-confirmed *Shigella* infection in Seattle & King County remains relatively stable (Chart 1), recent cases are increasingly occurring in men who have sex with men (MSM) (Chart 2). Male cases of shigellosis increasingly give a history of casual sexual contact, often in a bathhouse or other public sex venue. As additional evidence of this trend (Table 1), the ratio of male to female cases, normally hovering around 1, has more than doubled to 2.04 in 2001. Another indicator of the increased prevalence of shigellosis in this group is the rise in the percent of cases occurring in males aged 20-49, which has risen from 28% in 1995 to 47% in 2001 cases. Molecular studies using RFLP and PFGE have shown that a unique subset of *Shigella* strains is circulating among MSM.

Chart 1. Shigella Cases, Seattle & King County, 1996-2001

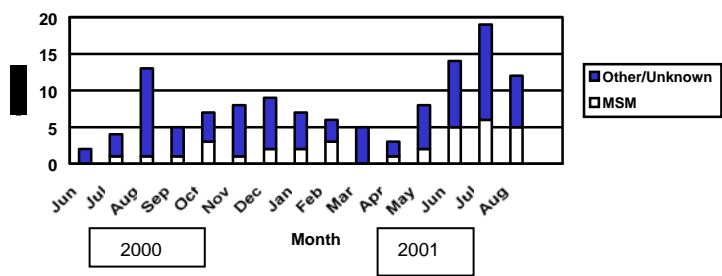


*Shigella*, often spread through fecally-contaminated food and water, can also be spread person-to-person. The infective dose of *Shigella* has been found to be as low as 100 organisms; in contrast, *Salmonella* usually requires an infectious dose of at least 10<sup>5</sup> organisms. This small infective dose, in turn, permits contact spread of shigellosis from person-to-person without the need for bacterial multiplication in a vehicle such as food or water. Ill persons shed as many as 10<sup>8</sup> *Shigella* bacteria per gram of feces.

Person-to-person transmission of *Shigella* has long been associated with conditions of crowding and poor personal hygiene, such as daycare centers caring for diapered children. Recently, however, many cities with substantial MSM populations world-wide have experienced outbreaks of shigellosis within their MSM communities. Sexual practices common in MSM foster fecal-oral exposure and contribute to the spread of the infection; indirect ingestion of *Shigella* bacteria through touching or licking contaminated skin can also lead to infection.

Many MSM shigellosis cases express surprise that such sexual behaviors put them at risk of contracting enteric illnesses such as *Shigella*, *Giardia*, hepatitis A, and *Cryptosporidium*. Prevention messages to MSM about shigellosis should emphasize the increased risk of transmission with oral-genital (fellatio) and oral-anal (anilingus) contact, the use of gloves for mano-anal contact, and the use of barrier methods for anal intercourse, fellatio, and anilingus. The avoidance of oral contact with fecally-contaminated body parts or objects,

Chart 2. Shigella Cases by Exposure Route  
Seattle & King County, July 200 - Aug 2001



and the importance of hand-washing after sex, should also be stressed. For MSM with active shigellosis, patient education should address the need for sexual abstinence while symptomatic and during the early post-symptomatic carrier period. Educating MSM about basic hand-washing and food hygiene is also important to prevent transmission by non-sexual routes.

Table 1. Shigella Cases, Seattle & King County

| Year                               | # cases | Ratio M/F | % males 20-49 |
|------------------------------------|---------|-----------|---------------|
| 1995                               | 156     | 1.11      | 28%           |
| 1996                               | 70      | 0.79      | 34%           |
| 1997                               | 99      | 0.87      | 30%           |
| 1998                               | 83      | 1.02      | 22%           |
| 1999                               | 64      | 0.77      | 33%           |
| 2000*                              | 81      | 1.89      | 46%           |
| 2001**                             | 70      | 2.04      | 47%           |
| * Foodborne outbreak cases removed |         |           |               |
| ** January-August                  |         |           |               |

Alarmingly, several bathhouse-acquired cases of shigellosis have occurred in persons who were HIV-positive, suggesting that such high-risk persons are practicing unsafe sexual behaviors. **Recent guidelines for HIV/STD prevention recommend that clinicians ask all male patients if they have sex with other men.** Clinicians treating MSM should counsel these patients about their risk of acquiring shigellosis and other enteric infections. Immunocompromised patients are at risk for severe disease with *Shigella*, *Giardia*, *Cryptosporidium* or hepatitis A. Antibiotic resistance to ampicillin and TMP-SMX is common in *Shigella* strains circulating in Seattle,

so clinicians should routinely request antibiotic sensitivity testing. For empiric treatment, quinolones are recommended. These clusters of *Shigella* infections among MSM are an important reminder to health care providers that the spectrum of STDs in MSM includes a variety of enteric infections.

Are your staff protected??

People who are ill with a communicable disease often present at a medical facility before the cause of their symptoms is obvious (e.g. during the disease prodrome); their illness may be transmitted to all patients and staff who are susceptible. During the recent measles outbreak in King County, many clinics were confronted with measles exposures to staff whose measles immunity status was not known.

The CDC’s Advisory Committee on Immunization Practices (ACIP) recommends that **everyone who works in a health care facility have proof of immunity to measles, mumps, rubella, and varicella to prevent airborne spread of these diseases. This also applies to employees who do not have direct patient contact, such as administrative and maintenance staff.**

Persons born in 1957 or later can be considered immune to measles, mumps, or rubella only if they have documentation of a) physician-diagnosed measles or mumps disease; or b) laboratory evidence of measles, mumps or rubella immunity (persons who have an "indeterminate" level of immunity upon testing should be considered nonimmune); or c) appropriate vaccination against measles, mumps, and rubella (i.e., administration on or after the first birthday of two doses of live measles vaccine separated by 28 days or more, at least one dose of live mumps vaccine, and at least one dose of live rubella vaccine).

Although birth before 1957 generally is considered acceptable evidence of measles, mumps and rubella immunity, health-care facilities should consider recommending a dose of MMR vaccine to unvaccinated workers born before 1957 who are in either of the following categories: a) those who do not have a history of measles or mumps disease or laboratory evidence of measles and mumps immunity, and b) those who lack laboratory evidence of rubella immunity. **Rubella vaccination, or laboratory evidence of rubella immunity, is particularly important for female staff born before 1957 who can become pregnant.** All employees should ensure that they are immune to varicella. Proof of immunity can be provided by: 1) giving a history of varicella disease, by self-report or that of a family member *or* 2) documentation of two doses of

varicella vaccine, *or* 3) laboratory evidence of immunity to varicella.

Due to the fact that health care workers, if infected with influenza, have a high potential for transmitting influenza to high risk patients, health care workers are defined as a high priority group for influenza vaccination. Therefore health care workers should be offered influenza vaccinations as soon as this vaccine becomes available in October.

Recruiting Physicians for CDC Influenza Surveillance

The CDC Sentinel Physician Influenza Surveillance program is recruiting physicians in King County. Sentinel physicians report each week directly to CDC (by toll-free phone call or fax) the number of persons with influenza-like illness. Sentinel physicians obtain 2-3 swabs of respiratory secretions each season for influenza virus testing. If you are interested in being a CDC sentinel physician for influenza surveillance, please call Phyllis Shoemaker, WA Department of Health, (206) 361-2830. Please note - this program is separate from the King County influenza surveillance program.

Help Prevent Perinatal Transmission of Hepatitis B!

OB-GYN, Family Practice & Nurse Midwife Providers: Please report ALL hepatitis B surface antigen positive (HBsAg+) pregnant women within 3 days of receipt of the prenatal laboratory screening report. Reporting assures the mother's enrollment in the perinatal hepatitis B tracking program, a program that ensures that newborns of these women receive timely hepatitis B immune globulin and hepatitis B vaccinations. **Health care providers are responsible for this reporting.** Report via the 24-hour, confidential voice mail at (206) 296-4782 or via fax at (206) 296-4803. Please direct other inquiries about reporting or the tracking program to Linda Vrtis, Public Health Nurse at (206) 296-4774. Report forms can be mailed to your office by calling Linda.

**Disease Reporting (area code 206)**  
**AIDS.....296-4645**  
**Communicable Disease...296-4774**  
**STDs.....731-3954**  
**Tuberculosis.....731-4579**  
**24-hr Report Line.....296-4782**  
**Hotlines:**  
**CD Hotline.....296-4949**  
**HIV/STD Hotline.....205-STDs**  
<http://www.metro.gov/health>

| Reported Cases of Selected Diseases, Seattle & King County 2001 |                        |      |                             |      |
|---|------------------------|------|-----------------------------|------|
| NR=Not Reportable in 2000                                       | Cases Reported in July |      | Cases Reported through July |      |
|   | 2001                   | 2000 | 2001                        | 2000 |
| AIDS  | 27                     | 18   | 211                         | 123  |
| Campylobacteriosis  | 29                     | 42   | 179                         | 184  |
| Cryptosporidiosis   | 2                      | NR   | 13                          | NR   |
| Chlamydial infections   | 329                    | 301  | 2433                        | 2530 |
| Enterohemorrhagic <i>E. coli</i> (non-O157)                     | 0                      | 0    | 3                           | 1    |
| <i>E. coli</i> O157: H7   | 6                      | 11   | 16                          | 28   |
| Giardiasis  | 13                     | 18   | 77                          | 133  |
| Gonorrhea   | 133                    | 83   | 870                         | 609  |
| <i>Haemophilus influenzae</i> (cases <6 years of age)           | 0                      | 0    | 0                           | 0    |
| Hepatitis A   | 2                      | 5    | 11                          | 64   |
| Hepatitis B (acute)   | 3                      | 3    | 24                          | 25   |
| Hepatitis B (chronic)   | 38                     | NR   | 307                         | NR   |
| Hepatitis C (acute)   | 0                      | 2    | 8                           | 6    |
| Hepatitis C (chronic, confirmed/probable)                       | 153                    | NR   | 833                         | NR   |
| Hepatitis C (chronic, possible)                                 | 44                     | NR   | 324                         | NR   |
| Herpes, genital   | 65                     | 63   | 439                         | 491  |
| Measles   | 0                      | 0    | 12                          | 2    |
| Meningococcal Disease   | 0                      | 1    | 6                           | 10   |
| Mumps   | 0                      | 1    | 1                           | 4    |
| Pertussis   | 1                      | 5    | 17                          | 136  |
| Rubella   | 0                      | 0    | 0                           | 1    |
| Rubella, congenital   | 0                      | 0    | 0                           | 0    |
| Salmonellosis   | 25                     | 24   | 148                         | 125  |
| Shigellosis   | 19                     | 4    | 61                          | 115  |
| Syphilis  | 2                      | 6    | 34                          | 47   |
| Syphilis, congenital  | 0                      | 0    | 0                           | 0    |
| Syphilis, late  | 5                      | 0    | 26                          | 15   |
| Tuberculosis  | 21                     | 6    | 82                          | 67   |